

Amendments to Claims

Claims 1-39 (Cancelled).

40. (New) A composition comprising an aqueous dispersion of an electrically conductive organic polymer and a plurality of nanoparticles wherein said electrically conductive organic polymer is selected from polyaniline with poly(2-acrylamido-2-methyl-1-propanesulfonic acid) as the counterion (Pani/PAAMPSA) and poly(ethylenedioxythiophene) with poly(styrenesulfonic acid) as the counterion (PEDT/PSS) and wherein nanoparticles are selected from the group consisting of inorganic nanoparticles, and organic nanoparticles.

41. (New) A composition according to claim 40, wherein said inorganic nanoparticles are selected from silica, alumina and electrically conductive metal oxides.

42. (New) A composition according to claim 40, wherein said organic nanoparticles are selected from polyacrylates, carbon nanotubes, and colloidal sulfonic acids.

43. (New) A composition according to claim 42, wherein the colloidal sulfonic acid is a perfluorethyl sulfonate.

44. (New) A composition according to claim 40, wherein said nanoparticles have a particle size less than about 500 nm.

45. (New) A composition according to claim 40, wherein said nanoparticles have a particle size less than about 250 nm.

46. (New) A composition according to claim 40, wherein said nanoparticles have a particle size less than about 50 nm.

47. (New) A composition according to claim 41, wherein the weight ratio of silica:electrically conductive polymer is about 4:1.

48. (New) A composition according to claim 41, wherein the weight ratio of electrically conductive oxides:electrically conductive polymer is about 1.5:1.

49. (New) A high resistance buffer layer comprising an electrically conductive polymer and a plurality of nanoparticles dispersed therein, wherein the nanoparticles are selected from the group consisting of inorganic nanoparticles, and organic nanoparticles.

50. (New) A high resistance buffer layer according to claim 49, wherein said organic nanoparticles are selected from polyacrylates, carbon nanotubes, colloidal sulfonic acids.

51. (New) A high resistance buffer layer according to claim 50, wherein said organic colloidal sulfonic acids is a perfluoroethylene sulfonates.

52. (New) An organic device comprising a high resistance buffer layer comprising an electrically conductive polymer and a plurality of nanoparticles dispersed therein, wherein said nanoparticles comprise nanoparticles selected from inorganic nanoparticles, and organic nanoparticles.

53. (New) A device according to claim 52, wherein said organic nanoparticles are selected from polyacrylates, carbon nanotubes and perfluoroethylene sulfonates.

54. (New) A device according to claim 52, wherein said electrically conductive polymer is selected from PANi/PAAMPSA and PEDT/PSS.